

APRIL/MAY 2023

CAMB42 — BIOSTATISTICS

Time : Three hours

Maximum : 75 marks



SECTION A — ($10 \times 2 = 20$ marks)

Answer ALL the questions.

1. Define Biostatistics.
2. What is frequency distribution?
3. What is arithmetic mean?
4. Define median.
5. Define correlation.
6. Write the formula of Spearman's rank correlation.
7. What is 'F-test'?
8. Define variance.
9. What is experimental design?
10. What is ANOVA?

SECTION B — ($5 \times 5 = 25$ marks)

Answer ALL the questions.

11. (a) Discuss the scope of Biostatistics.

Or

- (b) Explain the types of classification of data.

12. (a) What is mode? List out the merits and demerits of it.

Or

- (b) Find out the median from the following:
5, 11, 6, 10, 14, 21.

13. (a) What is regression analysis? Explain the types.

Or

- (b) Describe the types and methods of studying correlation.

14. (a) What is t-distribution? What are its uses?

Or

- (b) Give a short note on test of significance.

15. (a) Explain any one type of experimental design.

Or

- (b) Enumerate the principles and steps involved in one way ANOVA.

SECTION C — ($3 \times 10 = 30$ marks)

Answer any THREE questions.

16. Explain about the tabulation of data.

17. With suitable examples explain the measures of dispersion and its types.

18. Find out the coefficient of correlation from the following data.

Age of fish in days (X) 5 10 15 20 25 30 35

Weight in grams (Y) 3 7 12 15 20 25 30

19. Enumerate the conditions for the applications of χ^2 test. Add a note on the important characteristics of χ^2 test.

20. Summarize the basic principles of experimental designs.